

## United States Patent and Trademark Office



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/003,916	11/02/2001	Hiroyuki Ito	3019.002USU	7771	
7	590 08/11/2004		EXAM	INER	
Paul D. Greeley, Esq.			VIJAYAKUMAR, KALLAMBELLA M		
Ohlandt, Greel 10th Floor	ey,Ruggiero & Perle, L.L.I	<b>)</b> .	ART UNIT PAPER NUMBER		
One Landmark Square			1751		
Stamford, CT	06901-2682		DATE MAILED: 08/11/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	V
Office Action Summan	10/003,916	ITO ET AL.	
Office Action Summary	Examiner	Art Unit	
	Kallambella Vijayakumar	1751	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address	·
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be a ly within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS fro e, cause the application to become ABANDON	imely filed  ays will be considered timely.  m the mailing date of this communicati  ED (35 U.S.C. § 133).	on.
Status			
1) Responsive to communication(s) filed on			
<u> </u>	—· s action is non-final.		
3) Since this application is in condition for allowa		rosecution as to the merits	is
closed in accordance with the practice under			
Disposition of Claims			
4)  Claim(s) 1 and 2 is/are pending in the applicate 4a) Of the above claim(s) is/are withdrate 5)  Claim(s) is/are allowed.  6)  Claim(s) 1 and 2 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or	wn from consideration.		
Application Papers			
9) The specification is objected to by the Examine	er.		
10) The drawing(s) filed on is/are: a) □ acc		Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeyance. So	ee 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correc			(d).
11) The oath or declaration is objected to by the Ex	xaminer. Note the attached Offic	e Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)).	tion No ved in this National Stage	·
Attachment(s)			
1) X Notice of References Cited (PTO-892)	4) 🔲 Interview Summar		
2)	Paper No(s)/Mail [ 5) Notice of Informal	Date Patent Application (PTO-152)	
Paper No(s)/Mail Date	6) Other:	. atom Application (F 10-102)	

## **Detailed Action**

- Acknowledge the response and the arguments by the applicants filed 05/14/2004 in response to the office action mailed 02/12/2004.
- Acknowledge the election of Claims 1-2 and canceling of claims 3-4 in response to the Election/Restriction requirement. Claims 1-2 are currently pending with the application.
- Applicant's arguments, filed 05/14/2004, with respect to claims 1-2 have been fully considered and are persuasive, and the 102(b) and 103(a) rejections in office action mailed 02/12/12004 have been withdrawn excepting for the 102(b) rejection over Ikoma et al (US Patent No. 5,700,596) for the following reasons:

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1-2 are rejected under 35 U.S.C. 102(b) as anticipated by Ikoma et al (US Patent No. 5,700,596).

Ikoma et al teach the composition and making of *nickel hydroxides* with improved tap densities containing 1-7 wt% of at least one of Cd, Ca, Zn, Mg, Fe, *Co, and Mn* (Col-2, Line 67 to Col-3, Line 19) and forming the mixed/composite hydroxide of Ni by the co-precipitation of the constituent metals by the addition of sodium hydroxide to an aqueous solution of metal salts in a continuous process. The tap density of a typical example of the mixed hydroxide by Ikoma et al was *2.01 g/cc* and ranged between 1.1.8-2.3 g/cc for the working samples, wherein this would inherently meet the limitation of tap density of 1.5 g/cc in instant claim-1 and the limitations of instant claims 1-2 (Col-5, Lines: 1-10, Col-6, Lines 8-10, Table-1, Col-7, Lines: 66-67, Tables 2-3, Col-13, Table-10). Addition of 1-7 wt% of the component elements in the composition of the mixed hydroxides would translate to 0.02-0.11 Moles of Co and 0.02-0.12 Moles of Mn, when Co and Mn when are the preferred component elements from a small list containing only seven preferred metals would meet the limitation of composition and ranges in instant claim-2.

Applicants argue that that Ikoma et al do not disclose/provide any working examples consisting of Ni, Co and Mn per the limitations of the instant claims by the applicants, and this is not persuasive. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998).

Ikoma et al teach the compositions of the ternary composite Ni-hydroxide, Co and Mn as the preferred elements for incorporation in the composite Ni-hydroxide, and their preparation by co-precipitation method per the limitation of instant claim-1 by the applicants, whose derived composition is shown below:

The composition of the composite Ni-Mn-Co-hydroxide consisting of base nickel-hydroxide [Ni (OH) 2, FW: 92.71=1 Mole], 7 wt% Co [6.49 gm, 0.11 Mole=x] and 7wt% Mn [6.49 gm, 0.12 mole=y] would be:

 $Ni_{(1-x-y)}Co_xMn_y(OH)_2 \Rightarrow Ni_{(1-0.11-0.12)}Co_{0.11}Mn_{0.12}(OH)_2 \Rightarrow Ni_{0.77}Co_{0.11}Mn_{0.12}(OH)_2$  All the limitations of the instant claims are met.

The reference is anticipatory.

## Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ovshinsky et al (US patent 6,086,843) and Sato et al (US Patent 6,306,787 and WO 99/64355).
- THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action

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is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from

the mailing date of the advisory action. In no event, however, will the statutory

period for reply expire later than SIX MONTHS from the mailing date of this final

action.

• Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kallambella Vijayakumar whose telephone number is

571-272-1324. The examiner can normally be reached on M-Th, 07.00 - 16.30 hrs,

Alt. Fri: 07.00-15.30 hrs.

• If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Kmv

August 06, 2004.

(Yogendra n. Gupta

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 1700